MONTHLY WEATHER REVIEW.

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INTRODUCTION.

This REVIEW contains a general summary of the meteorological conditions which prevailed over the United States and Canada during June, 1886, based upon the reports from the regular and voluntary observers of the Signal Service and from co-operating state weather services.

Descriptions of the storms which occurred over the north Atlantic Ocean during the month are also given, and their approximate paths shown on chart i. In tracing the centres of the paths of these storms, data from the reports of one hundred and seventy-two vessels have been used.

The southward movement of ice massed to the northward of Newfoundland has been unusually late, and large quantities of fixed ice were reported off the coast of Labrador at the close of the month.

On chart i for this month are traced the paths of eleven areas of low pressure; the average number for June during the last thirteen years being 8.7. The areas described as numbers viii and xi were probably of tropical origin; during the northward movement of number xi over the Gulf and across the Florida Peninsula on the 30th it was accompanied by gales and very heavy rainfall.

The mean atmospheric pressure, as compared with that for June of previous years, shows only slight departures from the normal.

The temperature for the month was generally below the normal over the entire country except in the northwestern portions and in southern Florida, the most marked deficiencies occurring in the middle and south Atlantic states.

The rainfall over the western and northern portions of the country was deficient, while a very large excess occurred in the region south of the Ohio and east of the Mississippi rivers.

Drought has prevailed during the month in many districts, being severest in Dakota, Iowa, Texas, and Indian Territory.

Chart vi exhibits curves representing results of observations with the electrometer upon atmospheric electricity, and under that head will be found notes referring to the same.

In the preparation of this REVIEW the following data, received up to July 20, 1886, have been used, viz., the regular tri-daily weather-charts, containing data of simultaneous observations taken at one hundred and thirty-three Signal Service stations and sixteen Canadian stations, as telegraphed to this office; one hundred and sixty-two monthly journals; one hundred and sixty monthly means from the former, and sixteen monthly means from the latter; two hundred and eighty-three monthly registers from voluntary observers; sixty-two monthly registers from United States Army post surgeons; marine records; international simultaneous observations; marine reports through the co-operation of the "New York Herald Weather Service;" abstracts of ships' logs furnished by the publishers of "The New York Maritime Register;" monthly weather reports from the New England Meteorological Society, and from the local weather services of Alabama, Colorado, Georgia, Indiana, Minnesota, Missouri, Nebraska, Ohio, and Tennessee, and of the Central Pacific Railway Company; trustworthy newspaper extracts, and special reports.

ATMOSPHERIC PRESSURE.

[*Expressed in inches and hundredths.*]

The distribution of mean atmospheric pressure for June, 1886, determined from the tri-daily telegraphic observations of the Signal Service, is shown by isobarometric lines on chart ii.

The mean pressure for the month is greatest along the coast of Washington Territory and Oregon, where the barometric mean is shown by the isobar of 30.05. The mean pressure for Iowa and all of the United States lying east of the Mississippi River ranges from 29.92 to 29.98 and averages about 29.95. The pressure in Canada ranges from 29.95, in the lower lake region, to 28.85, in the lower part of the Saint Lawrence Valley. The area of barometric minima is enclosed by the isobar of 29.80, and covers an extensive portion of country, including Arizona, Nevada, Utah, Colorado, New Mexico, and western Texas. A small area, enclosed by the isobar of 29.75, lies in the southwestern part of Arizona; one station, Yuma, reporting a mean of 29.74.

The departures from the normal pressure are given in the tables of miscellaneous meteorological data, and are also shown on chart iv by lines connecting stations of equal departure. The pressure for the month is about normal, or slightly above, over the whole country, except in California, Texas, and the region lying south of the state of Pennsylvania and the Ohio River and east of the Mississippi River.

The mean pressure for June, when compared with that of the preceding month, shows an excess of .07 in New England, from which district it gradually decreases toward the west and southwest, until along the Missouri and Ohio rivers, and eastward through North Carolina, it coincides with the pressure for May. Over the remainder of the country the pressure is less than that of May, the greatest deficiency occurring in the southwestern districts.

BAROMETRIC RANGES.

The monthly barometric ranges at the various Signal Service stations are also given in the tables of miscellaneous data. The greatest ranges occurred in New England and westward to the Rocky Mountains. In the southern districts and along the Pacific coast the ranges were comparatively small.

The following are some of the extreme monthly ranges:

Greatest.	Inch.	Least.	Inch.
Portland, Maine	0.92	San Diego, California	0.27
Eastport, Maine	0.86	Key West, Florida	0.29
Boston, Massachusetts	0.83	Sanford, Florida	0.30
Albany, New York	0.83	Mobile, Alabama	0.32
Block Island, Rhode Island	0.82	Savannah, Georgia	0.32
New Haven, Connecticut	0.82	Chattanooga, Tennessee	0.32
Atlantic City, New Jersey	0.81	Los Angeles, California	0.32
New York City	0.80	Fort Davis, Texas	0.22
Sandy Hook, New Jersey	0.80	New Orleans, Louisiana	0.34

AREAS OF HIGH PRESSURE.

Seven areas of high pressure appeared within the limits of the United States during the month of June, 1886. They were